JENOPTIK

JD 4.1Z8

Digital Camera User Guide

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Read First

Before using the camera, please make sure that you read and understand all the following safety precautions. Always ensure that the camera is operated correctly. The safety precautions will instruct you in the safe and correct operation of the camera and its accessories, preventing injuries or damage to yourself, other persons and equipment.

In the following pages, the term "equipment" refers mainly to the camera and its power supply accessories.

To prevent possible injury, please observe the following warnings when using JENOPTIK products.

• Do not use the flash too close to eyes

Using the flash too close to your subject's eyes can injure the eyesight. Especially, remain at least one meter (39 inches) away from infants when you use the flash.

• Do not place camera strap around neck

The strap could result in suffocation when accidentally wound around neck.

• Do not open or disassemble

Disassembling the equipment may cause high-voltage electrical shock. Interior inspections, modifications and repairs should be conducted by qualified service staff. Please take the product to a JENOPTIK authorized service center for inspection.

• Turn off immediately when malfunction

If you notice unusual smell or smoke coming from the equipment, please unplug the AC adaptor and remove the battery immediately. Proceed swiftly with caution to avoid burns. Take the equipment to JENOPTIK authorized service center for inspection.

• Unplug the adaptor when the camera is not in use

If you use the adaptor as the power source, unplug the adaptor when the camera is not in use to prevent fire and other dangers. Continuous use over a long time may lead to overheating, deformation and fire.

Battery

Observe the following instruction when handling battery used in this product. Improper use of battery may lead to leakage or explosion.

- Recharge only Ni-Mh or Ni-Cd AA rechargeable batteries. Recharging batteries that are not rechargeable may leads to leakage or explosion.
- Check battery polarity before inserting. Do not attempt to insert the battery upside down or backward.
- Do not disassemble or short circuit the battery.
- Do not expose battery to fire or excessive heat.
- Do not immerse or contact with water or other liquids.
- Stop using the battery immediately if noticing any deformation or changes in color.
- Do not put the batteries along with metal objects such as coins, keys or hairpins in your pocket.
- Keep battery out of the reach of children. Seek medical attention right away if a child swallows a battery.

Observe and exercise the following cautions to avoid damage and keeping your JENOPTIK camera in an optimum working status.

Keep Dry

This camera is not waterproof, and may malfunction when immersed in water, or any liquids to enter the interior of the camera

• Away from Moisture, Salt or Dust

Wipe off salt or dust with a slightly dampened soft cloth after using your camera at the beach or seaside, then, dry your camera thoroughly.

• Away from Strong Magnetic Fields

Never put the camera too close to any equipment producing strong electromagnetic fields, such as electric motor. Strong electromagnetic fields could lead to camera malfunctions or interfere the data recording.

Avoid Intense Heat

Do not use or store the equipment under sunlight or high temperatures. Such exposure could lead to the leakage of the batteries or deformation of the casing.

• Avoid rapid temperature change

Rapidly moving the equipment between hot and cold temperatures may form water droplets on its exterior and interior. To prevent the condensation, place the equipment in its carry case or a plastic bag before exposing it to a rapid temperature change.

• Do not drop

Strong shock or vibration of dropping could cause malfunction. Keep the strap around your wrist when carrying the camera.

• Do not unplug or remove the battery when the processing data

When images data are being recorded or deleted from memory cards, cutting off power could result in data loss or damage the internal circuitry or memory.

• Carefully handle the lens and all moving parts

Be careful not to apply too much force to the lens, memory card, battery or the jack cover. These parts are not design to take extra force than regular use.

• Battery

In low temperature circumstances, the battery's capacity may decrease significantly due to the inactive chemical reaction. When taking pictures in cold weather, keep a warm backup battery on hand.

Should the battery terminals become dirty, wipe them with a dry, clean cloth or use an eraser to remove the stain.

• Memory cards

Turn off the power before inserting or removing the memory card.

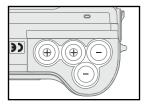
Otherwise, the memory card could become unstable.

Memory cards may getting hot during use, remove memory card from the camera with care.

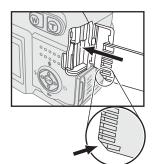
Unpack the Camera

Digital camera x 1 AA alkaline battery x 4 Camera case x 1 Camera wrist strap x 1 Video cable x 1 USB cable x 1 32MB SD card x 1 Driver software CD-ROM x 2 User's guide x 1 Product Warranty card x 1

Quick Start



Insert 4 AA batteries. See page 16.

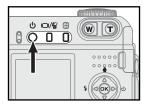


Insert SD/MMC card. See page18.



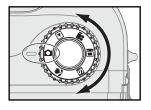
2

Remove the lens cap.



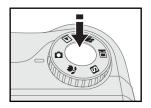
4

Turn on the power of the camera. See page19.

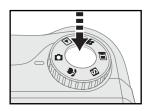


5

Rotate the mode dial to **D** and frame your subjects in the LCD monitor.



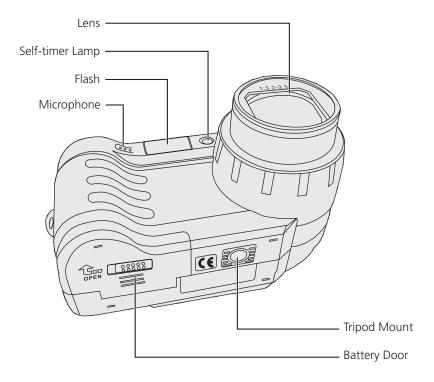
6 Slightly press the shutter release button halfway down and hold it to lock the focus.

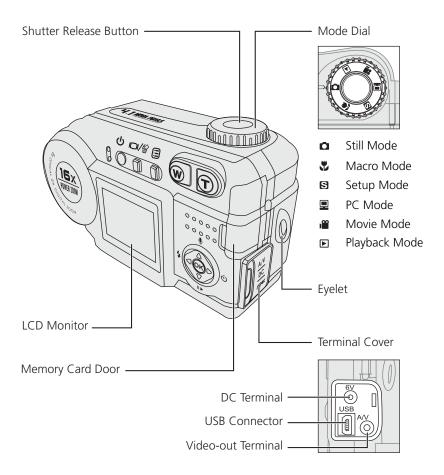


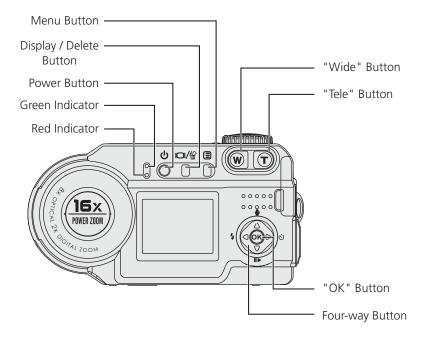
Press the shutter release button all the way down to take the picture.

Chapter 1 Getting Started

Camera Parts







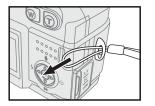
Green Indicator	Red Indicator	Status
On	The camera works normall	
		The camera is busy (flash
	Blinking	charging, process recording,
		loading) and cannot be
		operated.
	On	Warnings and errors such as
		low battery or failure in
		operation.

Note : The red indicator lights up during the focus locking. When the camera locks the focus, the red indicator goes out. If focus looking fails, the red indicator blinks and then goes out.

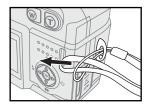
<u>Set Up</u>

Attaching the Wrist Strap

Z

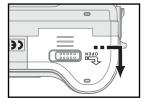


With the back of the camera facing you, insert the small loop of the wrist strap into the eyelet on the right side of the camera, and then insert the long loop of the strap into the small loop of the strap.

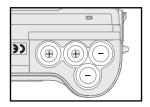


Pull the wrist strap to tighten it on the eyelet.

Inserting the Batteries

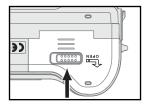


Turn the camera up side down with the front of the camera facing you, open the battery door of the camera by sliding the latch to the right and pull the battery door toward you.





Insert four AA batteries.

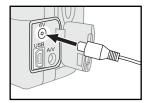


Close the battery door by pushing the battery door to the back of the camera.

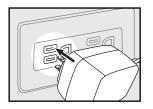
Note: To save the battery power, refer to "Auto Off" function. (See page 74)

Using the AC Adaptor

When operating the camera indoors, you can use the AC adaptor as the power source to save the battery power.

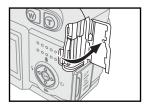


Open the terminal cover and connect the AC adaptor connector to the AC adaptor terminal of the camera.

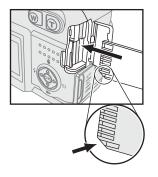


2 Connect the other end of the AC adaptor to the electrical outlet.

Inserting the Memory Card



With the back of the camera facing you, open the memory card door on the right side of the camera.

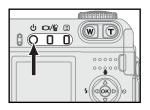


- 2 Insert the memory card into the slot and push it to the end. Make sure it is in place.
 - Close the memory card door.
- Note 1: To remove the memory card, make sure the power is off first. Push the memory card inside the slot and it springs out. Note 2: The data could be incomplete if you remove the card under any circumstances.

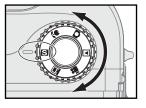
Turning on Power

Press the $\boldsymbol{\bigcup}$ "Power" button to turn the camera on.

Note : To turn off the camera, press the power button again.



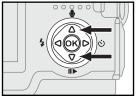
Choosing the Language



Rotate the mode dial to old S "Set Up" mode.



2 Scroll to "Language" by pressing ▲▼ on the four-way button.







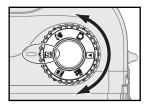
Press "OK" and then select the language you need.



Press "OK" to finish the setting.

Setting the Date and Time

The first time you turn on your camera, set the date and time so that they are correct on the pictures you take.





-DATE / TIME	
DATE 2003.03.29	
TIME 02:35:00	
ADJUST SELECT MENU BACK OK SET	

- 2
- Scroll to "Date/Time" by pressing $\blacktriangle \checkmark$ on the four-way button.

Rotate the mode dial to **S** "Set Up" mode.

Press "OK" and then adjust the values of the date and time by using ▲ ▼ on the fourway button.



Select the values you want to adjust by pressing $\blacktriangleleft \triangleright$ on the four-way button.



Press "OK" to finish the setting.

Chapter 2 Taking Pictures and Recording Video Clips

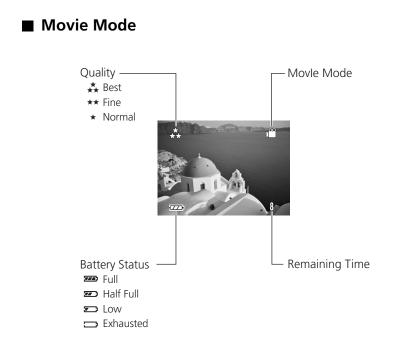
<u>Using the LCD Display</u>

When you turn the camera on, the LCD monitor turns on automatically. With the LCD monitor, you can frame images that you want to take or record as video clips. You can also view the menus of each mode. The following figure gives you the information of the icons appearing on the LCD monitor.

Note: You may not see the LCD display clearly when using the LCD monitor under intense light, such as sunlight. You can adjust the LCD brightness to improve the situation. See page 77.

- Flash Modes Zoom in / out Indicator Auto Flash Ouality ▲ RER Auto Flash 🚓 Best Anvtime Flash ★★ Fine slow Sync. ★ Normal Flash Off Image Size Drive Modes & Self-timer 2304 x 1728 Single 1600 x 1200 □ Continues 640 x 480 10 AL **GF** Bulb Shutter ΔF — Aperture Priority 🕅 Full 3 sec Self-timer Central to sec Self-timer Spot #0004/0017 Macro Mode WR -Image Number / Auto Remainder 💢 Daylight **Battery Status** Fluorescent -Ö. Tungsten 🛲 Full 📨 Half Full EV Compensation -🗩 Low - Exhausted

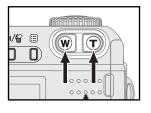
Still & Marco Mode



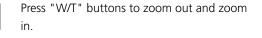
<u>Using Zoom</u>

This camera provides you with 8x optical zoom and 2x digital zoom.

Optical Zoom



1.0 30



 $2 \quad \mbox{You can see the icon of "W/T" and it's value} \\ (from 1.0 ~ 8.0) \mbox{ on the LCD monitor.}$



Digital Zoom

To activate the function of digital zoom, you have to set the digital zoom to "On". (See page 44) You can see appearing on the LCD monitor when the digital zoom function is on.



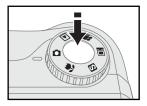
Taking Still Pictures

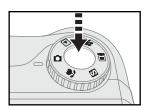
Focus Brackets

Focus brackets help you frame the subjects you want to take or record and lock the focus. In still, macro or video mode, press the shutter release button half way down and the focus brackets appear on the LCD monitor.









Frame your subjects with focus brackets.

Slightly press the shutter release button halfway down and hold it to lock the focus.



Press the shutter release button all the way down to take the picture.

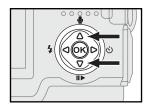
Chapter 2: Taking Pictures and Recording Video Clips

Manual Focus

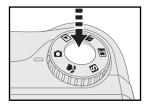
In addition to auto focus function, the camera allows you to adjust the focus manually.



In still or macro mode, press "OK" and you can see 🖪 appearing on the LCD monitor.



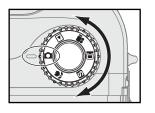
Adjust the focus by using $\checkmark \checkmark$ on the fourway button.



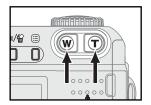
- After checking that the subject is in focus, press the shutter release button all the way down to take the picture.
 - To cancel manual focus function, press "OK" again.

Using Still Mode

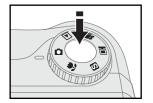
Still mode allows you to take still pictures.



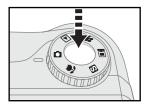
Rotate the mode dial to **D** "Still Mode".



2 Frame your subjects in the LCD monitor by moving the camera or using W/T buttons.



- 3
- Slightly press the shutter release button halfway down and hold it to lock the focus.

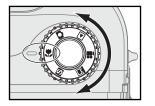


Press the shutter release button all the way down and take the picture.

Note: When the shutter speed is too slow, appears on the LCD monitor. We recommend you use a tripod to avoid taking blurry pictures caused by hand shake.

Using Macro Mode

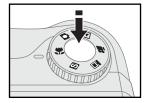
Macro mode allows you to shoot images at close range and get a close-up.



Rotate the mode dial to **C** " Macro Mode" and the green icon of "Macro Mode" appears on the right side of the LCD monitor.

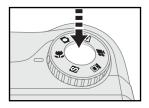


2 Frame your subjects in the LCD monitor by moving the camera or using W/T buttons.





Slightly press the shutter release button halfway down and hold it to lock the focus.



4

Press the shutter release button all the way down and take the picture.

Note: The default flash mode is " Flash Off" in macro mode. You can change the flash mode by using ◀ on the four-way button.

Self-timer

Self-timer function allows you to take pictures 3 or 10 sec after you press the shutter release button all the way down.



Set the duration of self-timer. See page 40.

- Press ▶ on the four-way button to start
 self-timer function and ⅔ / ⅔ icon appears on the LCD monitor.
- Put the camera on the flat and steady place or use a tripod.
 - After locking the focus and pressing the shutter release button all the way down, the self-timer lamp blinks slowly first and then quickly for 3 or 10 sec.
 - The camera takes the picture automatically.

Ь

Note: The self-timer function goes back to default (Off) after taking a picture.

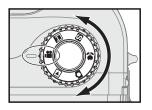
Built-in Flash

When taking pictures in difficult lighting condition, you may need the flash to get correct exposure. The camera provides you with five built-in flash modes. You can change the flash mode in still or macro mode directly by using \blacktriangleleft on the four-way button.

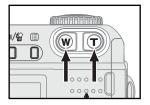
Mode	Function
🏚 Auto Flash	Speedlight fires automatically when the subject
	is dark.
Auto Flash with Red-eye	Reduces the "red-eye" effect results from the
Reduction	flash.
Anytime Flash Speedlight fires whenever you take a shot.	
✤ Slow Sync.	Speedlight fires with slow shutter speed to get
	natural exposure.
Flash Off	Flash is turned off.

Recording Video Clips

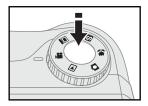
Movie mode allows you to record video clips.



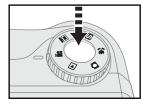
Rotate the mode dial to $\ensuremath{\mathbb{H}}$.



Frame your subjects by using "W/T" beforeyou start recording.



- 3
- Slightly press the shutter release button halfway down and hold it to lock the focus.



Press the shutter release button all the way down to start recording.

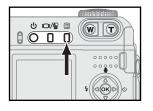


Press the shutter release button again to stop recording.

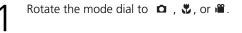
Note : You can't zoom in/out or change the focus after you start recording video clips.

Using the Capture Menu

Still, macro and movie modes allow you to capture either still or motion images so we would like to introduce the options in the capture menu in this section. Options in capture menu allow you to adjust settings for picture taking.









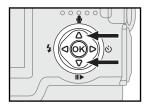
Press 🗉 "Menu" button.

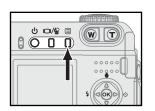


Scroll through the menu and the submenu by using $\blacktriangle \lor$ on the four-way button.



Press "OK" to enter the menu and the submenu as well as finish the setting.





5

After finishing the setting, press "Menu" button again to exit.

Image Size

In this function, you can choose in which image size (the number of pixels) that you want your pictures stored in the memory card. This camera provides you with three kinds of image size. You can gain detailed images with high resolutions; the file size will be large, and vice versa.



In still or macro menu, select "Image Size" and then press "OK".



Select "2304 x 1728", "1600 x 1200", or "640 x 480".

Press "OK" to finish the setting.

Chapter 2: Taking Pictures and Recording Video Clips

Quality

In order to reduce the size of the image for more storage of pictures in the memory card, images are compressed. However, compression leads to the loss of image quality. In other words, the less you compress the image, the better the image quality, and the less picture you can store in the memory card.



In still, macro, or movie menu, select "Quality" and then press "OK".



Select "Best", "Fine", or "Normal".

Press "OK" to finish the setting.

Image Size	Quality (Compression)		
(Resolution)	Best	Fine	Normal
2304 x1728	1550K	775K	388K
1600 x1200	775K	388K	194K
640 x 480	129K	64K	32K

Using the Capture Menu

Drive Mode



In still or macro menu, select "Drive Mode" and then press "OK".



- Select "Single", "Continues", "Bulb Shutter", or "Aperture Priority".
 - Press "OK" to finish the setting.

Mode	Function
	Capture a single picture each time you press the shutter
Single	release button all the way down.
	Press the shutter release button all the way down to cap-
🕒 Continues	ture six continuous pictures.
🖙 Bulb Shutter	Slow shutter speed allows more light to come in the cam-
	era.
Sector Priority	You set the aperture, and the camera automatically
	calculates the best shutter speed to expose the image.

Note : When you activate continuous shooting mode, the flash mode turns to "Off" automatically.

EV (Exposure Compensation)

In some difficult lighting condition, the automatic exposure may be fooled into giving the wrong readings. Exposure compensation allows you to adjust the exposure value and correctly expose your pictures.



In still or macro menu, select "EV" and then press "OK".



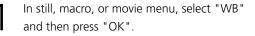
- Adjust the exposure value (from $-2.0 \sim +2.0$) by using $\blacktriangle \lor$ on the four-way button.
 - Press "OK" to finish the setting.

Note: You can also adjust EV by using ▲ ▼ on the four-way button in still or macro mode without entering the menu. When pressing ▲ ▼ on the four-way button, EV appears on the left side of the LCD monitor.

WB (White Balance)

WB allows you to correct color shifts result from different lighting conditions when taking pictures.







- Select "Auto", "Daylight", "Fluorescent", or "Tungsten".
 - Press "OK" to finish the setting.

Mode	Function	
Auto	The camera will automatically adjust the setting according	
& Auto	to the lighting condition.	
🌣 Daylight	Setting for shooting in sunny or cloudy condition.	
# Fluorescent	Setting for shooting in fluorescent condition	
- Tungsten	Setting for shooting in incandescent or halogen condi-	
i ungsten	tion.	

AE (Auto Exposure)

This camera provides you with three metering modes to gain proper exposure.



In still, or macro menu, select "AE" and then press "OK".



2 Select "Full", "Central", or "Spot".

Press "OK" to finish the setting.

Mode	Function
F U	Meters the EV from the whole picture area. You can use
Full	this mode in most cases.
	Meters the EV from the central area of the LCD monitor.
Central	(usually a 12mm diameter area) Best for shooting backlit
	subjects.
	Meters the EV from a circular area (about in 3-5mm) in
 Spot 	the middle of the LCD monitor. Use this mode to shoot
	pictures with a specific exposure area.

ISO value affects the camera's sensitivity to light. The default ISO setting is "Auto", but you can also adjust the setting manually. Use low ISO value in bright condition, and high ISO value when light is insufficient.



In still, macro, or movie menu, select "ISO" and then press "OK".



- **7** Select "Auto", "ISO 100", or "ISO 200".
 - Press "OK" to finish the setting.
- Note 1: High ISO value may lead to noise in the picture.
- Note 2: The default ISO speed is "Auto". So, the ISO speed resets to "Auto" after you turn off the camera.

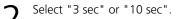
Self-timer

This function allows you to adjust the duration of self-timer.



In still or macro menu, select "Self Timer" and then press "OK".





Press "OK" to finish the setting.

Note: To start self-timer function, Press ► on the four-way button.

Sharpness

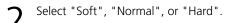
I

Adjusting settings of sharpness allows you to emphasize or soften the edge of the image.



In still, macro, or movie menu, select "Sharpness" and then press "OK".





Press "OK" to finish the setting.

Mode	Function
	Emphasizes the outline. If you want your subjects (such as
🖪 Hard	buildings) to have a clear and sharp outline, we suggest
	that you use this mode.
Normal	Suitable for ordinary shots.
	Softens the outline. If you want your subjects (such as
🗅 Soft	people) to have a soft outline, we recommend that you
	use this mode.

Chapter 2: Taking Pictures and Recording Video Clips

Saturation

Saturation is the intensity and purity of color. This option allows you to adjust the saturation of the image.



In still, macro, or movie menu, select "Saturation" and then press "OK".



- 2 Select "More", "Normal", or "Less".
 - Press "OK" to finish the setting.

Style

This mode allows you to have special effect on the pictures or the video clips.



In still, macro, or movie menu, select "Style" and then press "OK".



- 2 Select "Normal", "Sepia", or "Black & White".
 - Press "OK" to finish the setting.

Mode	Function
Normal	No special effect.
🖸 Sepia	Makes the pictures look like ancient ones. (reddish -brown)
🖪 Black & White	Produces black & white photos.

Digital Zoom

To activate digital zoom function:



In still menu, select digital zoom, and then press "OK".

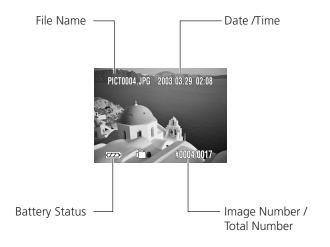


2 Select "On" or "Off".

Press "OK" to finish the setting.

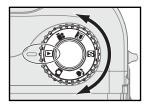
Chapter 3 Reviewing Images and Video Clips

Using the LCD Display



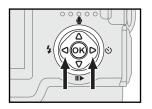
<u>Using Playback</u>

Playback mode allows you to review still images/video clips and play audio memos.

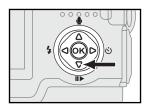


Rotate the mode dial to \mathbf{E} "Playback" mode.

- PICT0004.JPG 2003.03.29 02:08
- 2 The last still picture you take and the information of that picture appear on the LCD monitor.



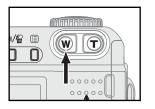
Use ◀ ▶ on the four-way button to move forth and back through the still pictures.



- 4
- Use \checkmark on the four-way button to start/ pause playing video clips.

Index Display

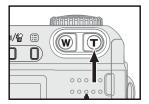
By using the function of index display, you can view at most six still pictures at a time.





Press " Wide" button and switch single display to index display.

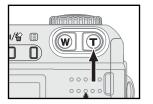
2 Use ◀ ▶ on the four-way button to highlight single picture and ▲ ▼ on the four-way button to move to the previous or the next six pictures.



- 3
- Press " Tele" to return to single playback.

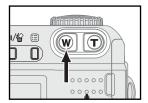
Digital Enlargement

The function of digital enlargement allows you to enlarge a single image to 12x, and a video thumbnail image to 1.5x.





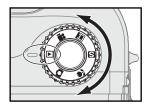
Press "Tele" button in single display and then browse the enlarged image by using the four-way button.



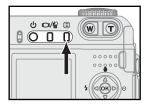
- Press "Wide" button to return to the original image size step by step. Press □ or Menu button to go back to single display.
- Note: The maximum of enlargement ratio is according to the image size.

Using the playback menu

Using the Playback Menu

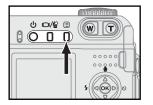


Rotate the mode dial to 🗈 .



Press 🗉 "Menu" button.





Scroll through the menu and the submenu by using $\blacktriangle \forall$ on the four-way button.



Ϊ

Press "OK" to enter the menu and the sub menu as well as finish the setting.



After finishing the setting, press (I) "Menu" button again to exit.

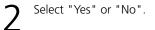
Delete All

This function allows you to delete all of the still pictures and video clips.



In playback menu, select "Delete All".





Press "OK" to finish the setting.

Note 1: To delete single picture, choose the one you want to delete and then press the "Display" button. Choose "Yes" or "No" and then press "OK".

Note 2: If the file is under protection, you have to remove the protection first and then delete it. See page 55 "Protect"

Slide Show

When reviewing still pictures, you can adjust some settings here and the camera automatically displays the pictures one by one on the LCD monitor.



In playback menu, select "Slide Show".



- Select " Start", " Interval", "Direction", or "Repeat".
 - Press "OK" button to finish the setting.

Mode	Function
Start	Begins the display.
Interval	Adjusts the interval (1~30 sec) between each picture dur-
	ing the display.
Direction	Decides in which direction ("Forward" or "Backward") to
Direction	display the pictures.
Repeat	Repeats the display.

Note: During the slide show, press any key (except for the power button) to stop it.

Memo

You can record audio memos for each still pictures.



In playback menu, select "Memo" and then press "OK".

- To record an audio memo, select "Record" Ζ and press \blacktriangle on the four-way button to start/stop recording.
- To play an audio memo, select "Play" and press "OK" button to start playing. Use **v** on the four-way button to pause/start playing.



- To delete a memo, select "Delete".
- Note: You can record audio memos by directly using (recording memos) and ▼ (play/pause memos) on the four-way button without enter the menu.

DPOF

When you print pictures by directly connecting the camera to the printer, DPOF allows you to select pictures and printing quantities.









In playback menu, press "DPOF" and then press "OK".

To decide which picture to print and the number of copies, select "Standard".

B Use ◀ ▶ on the four-way key to select the pictures and ▲ ▼ on the four-way key to adjust the numbers of printing. Press "OK" to finish the setting.



To print index of pictures (six images in a print), select "Index".

5



To cancel all of the settings for printing, select "Delete".

Folder

You can view pictures in different folders of the memory card. The camera creates a new folder after 10000 pictures taken.



In playback menu, select "Folder" and then press "OK".

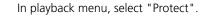


- Choose among the folders and select theone that you would like to view.
 - Press "OK" to finish the setting.

Protect

Protect function prevents the pictures and video clips from modifying and deleting.









- 2 Select "Set One", "Remove One", "Set All" or "Remove All".
 - Press "OK" button to finish the setting.
- Note 1: appears on the LCD monitor when you protect the picture.
- Note 2: All of the images, including the protected ones, are deleted when you format the memory card.

Note 3: Audio memos in still images can't be deleted when the image is protected.

Mode	Function
Set One	Protects the current picture you're viewing.
Remove One	Cancels the protection of the picture.
Set All	Protects all the pictures.
Remove All	Cancels all the protection.

Chapter 4 Installing the Software

The software CD supplied with the camera includes the driver and the application (Digital Image, PhotoImpression, and VideoImpression). The application allows you to upload the images from the camera, view them, print them, and e-mail them. So please install the software before you connect the camera to the computer.

Windows System Requirements

- Windows 98, 98 SE, ME, 2000, and XP
- Pentium II processor or greater
- 32MB of available RAM
- 200MB of available hard disk space
- CD-ROM drive
- USB port
- Color Monitor with a minimum resolution of 800 x 600 pixels

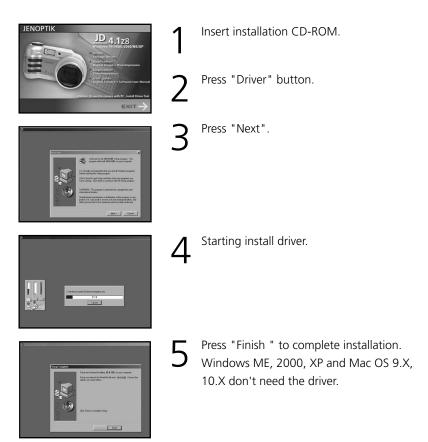
Mac OS Requirements

- Mac OS 9.x, 10.0, and 10.1
- 32MB of available RAM
- CD-ROM drive
- USB port
- Color Monitor with a minimum resolution of 800 x 600 pixels

Installing the Software

Installing the Driver

If you use Windows 98, or 98 SE as the OS in your computer, install the driver first by following the on-screen instruction.



Monard Decode 11 Stage	 Press "Yes" to continue install DirectX 8.1. Note : We suggest to install DirectX 8.1 for all Win OS.
Neuron Proceed on Lange The start for the lange l	7 Press "Yes".
Notifies Measura(1) Service(1) Seatory In page 2014 (Intel Concerns of adding a receiption Thange dia a Noricosa)	8 Starting install DirectX 8.1.
Cancel Sumary 15	${\sf 9}^{\sf Press}$ "Sure" to complete installation.
	10 Restart your computer.

Installing the Application (Windows)



hoose Setup Language Select the language for the installat	ion from the choices below.
Chinese (Simplified) Chinese (Indikona) Datch (2010) Forech (Standord) Gemain (Islain Japoneio Poinguaes (Standard) Spanish	
	Cancel

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	EATT	7

icense Agreement			
Please read the following license agreeme	ni carehally.		
PLEASE READ CAREFULLY BEFORE IN	ISTALLING		-
ASW Software License Agreement			
This document is a legal agreement betwe Corporation (43%/). Please read this Agree otherwise using the Software Program, so agreement.	spect carefully Rule	no privato configura	-
1. Copyright The Software Program (the "Program") is representative, and is protected by the ap	s owned by A&W o plicable laws in the	nts authorized country where you an	
(*) gccept the terms of the license agree	treen		
C I do not accept the terms of the license	- Andrewski		

hoose Destination Location	
Select folder where setup will install files.	
Setup vill install Digital Image in the following folder.	
To install to this folder, click Next. To install to a different folder another folder.	, click Browse and select
Destination Folder	
Destination Folder C.\Program Files/Digital I mage	Вузиков

Turn on the computer and then insert the software CD into the CD-ROM drive.

After you insert the CD into the CD-ROM
drive, the first Install window will appear.
If the install window doesn't appear, click
"Start" and then "Run". Type "E:\ JENOPTIK.
exe " E is the drive letter that contains the software CD.

Click "Digital Image • PhotoImpression".

2

Select a language and click "Next". Follow the on-screen instruction to continue the installation.

1

Accept the license agreement and then click "Next".



Click "Next". Follow the on-screen instruction to continue and finish the installation.

Select language that you want and press X
Select hinguage that you want and press
English
Sure Cancel

Right after the Digital Image installation finishes, the computer proceeds to install PhotoImpression. Select a language and click "Next". Follow the on-screen instruction to continue the installation.

Please read the following license agree	ment carefully.	ArcSc
Press the PAGE DOWN key to see the	rest of the agreement.	
End User License Agreement		
The following is a legal software licens and ArcSoft. Inc. Carefully read this lic the product indicates that you have re	cense agreement before	using the product. Using
Grant of License. This license permits package on any single computer. For	each software licensee.	the program can be 'in
use" on only one computer at any give		
use" on only one computer at any give Do you accept all five terms of the pre- setup will close. To install PhotoImpers		

Accept the license agreement and then click "Yes".

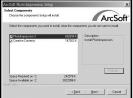
Click "Next".

To install to this folder, click Next. To install to another folder.	ng tolder. a different fol:	er, click Brows	e and select	
- Destination Folder D. Vinogam Filet AusSoft Photol Ingression	3		Bjowse	
	< Back	Next>	Cance	-

on Location sre Setup vill instal filer ArcSoft

Click "Next". Follow the on-screen instruction to continue and finish the installation.

Note: Follow step 6~9 to install VideoImpression.



Installing the Application (Macintosh)

- Digital Image
- Turn the computer on and then insert the software CD into the CD-ROM drive.



3

5

1

Click the CD icon on the desktop to start the installation.



Click	"Digital	Image".
-------	----------	---------

	🔤 🗍 Digita	al Image	Ð	
0 X 0	2 個項目	0 K 可用		
Digital Imag	e Installer	installers		4 >
			 1	





Select the language.

Chapter 4: Installing the Softwar

	License	
PLEASE READ CAREFULI	Y BEFORE INSTALLING	
A&W Software License	greement	
(A&W). Please read this	agreement between you and Advanced & Wise Technology Corporation Agreement carefully. By installing, copying, or otherwise using the Softwo e bound by the terms of this iconse agreement.	
protected by the applic conventions on copyright	(the "Program") is owned by A&W or its authorized representative, and the laws in the country when you are resided and international tendes a matters. Adv measure all the right unastraction in this contract. You re ament of the copyright if you fail to comply with the tarms and condition	nd lay
Program bounded by th A. Under this license, yo	ement, you have the non-exclusive and non-transferable license of the following terms may: not non matchine at one time, unless this Agreement specifies otherwise	
(1) on the regulary		*,
	Print_ Save As. Decline Acces	

Click "Accept".

6

Digital image installer	DB
Easy Install	
finstalle the Digital Image application package and related items into your Herd disk.	
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7	Click	"Install".
/		

	Installing			
remaining to ling: Digita	o be installed 1 Image	852		
 _] Sto	pp)
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Restart your computer.

- PhotoImpression
- Insert the software CD into the CD-ROM drive.
- 2 ^{CI}
- Click the CD icon on the desktop to start the installation.



Click "PhotoImpression".



Select the language.



5

Click "PhotoImpression Installer".

License	📕 🌈 Click "Accept"
The lines increase Agreement The lines increase Agreement prove the set of age in characteristic increase agreement hyper the set of age in the set of age in the set of a set of a set of a provement in the set of age in the set of a provement in the set of a set of a set of a provement in the set of a set of a set of a provement in the set of a set of a set of a provement in the set of a set of a set of a provement in the set of a set of a set of a provement in the set of a set of a set of a provement in the set of a set of a set of a provement in the set of a set of a set of a set of the set of a set of the set of a set of the set of a set of the set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set of a set o	6
Photoimpression installer E	7 Click "Install".

• VideoImpression

To install VideoImpression, follow step 1~7 of PhotoImpression installation.

Using the Application

Digital Image



Connect the camera to the computer. See page 69.

Launch Digital Image and press "Yes" to download the images from the camera.



To reserve the images in the memory card, press "No"; to delete all of the images in the memory card, press "Yes".





2

Select the image that you want to edit.





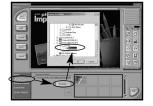
Use the tools to edit the image or click 🖾 to link PhotoImpression.

PhotoImpression





Launch PhotoImpression.



To download the images from the camera, select "From Folder", "Browse", "Removable Disk", "Dcim", "100xxxxx", and press "Ok". Click the image that you want to edit in the frame.

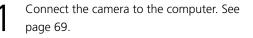


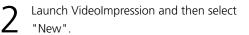
You can open two images at the same time.

VideoImpression

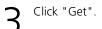
video mession

Imp











Select "DCIM" to download the video clips from the camera.



5 Select the video clips. Click "add to story board" and then "Play movie"

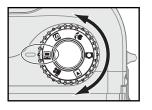


- 6
- Press "Play" to play the video clips.

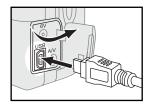
Chapter 5 Uploading, Printing and Displaying Images

After you take pictures, you can upload images to a computer from your camera, print them with a printer, and display them on a TV.

Uploading to a Computer



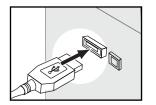
- Turn on the camera and then rotate the mode dial to \blacksquare .
- Connect the larger end of the USB cable tothe USB slot of a computer.



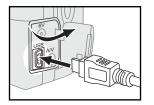
- Open the terminal cover and connect the small end of the USB cable to the camera.
- The computer automatically detects the camera as a mass storage device so that you can copy the image file from your camera to the hard drive of a computer.
- Note 1: Upon connecting the camera to a computer, the LCD monitor turns off automatically.
- Note 2: If you use Windows 98/98SE as the OS in your computer, you have to install USB driver from the software CD-ROM.
- Note 3: The data could be incomplete if you remove the card under any circumstances.

Printing Images

After uploading the images to a computer, you can print them by using the software packed with the camera. You can also connect the camera directly to some specific printers (such as Olympus P400 Photo Printers). To connect the printer:



Get the USB cable and connect the larger end of it to the printer.



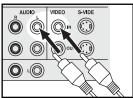
- Open the terminal cover and connect thesmall end of the USB cable to the camera.
- Adjust the settings of DPOF in Playback Menu.See page 53.

Displaying Images on a TV

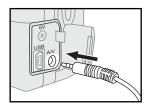
By connecting to a TV, you can view images as a slideshow and play audio/video clips.



Select right TV system in "Set Up" mode. See page 76.



Connect the A/V (Audio/Video) cable to the A/V inputs of a TV.

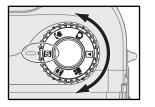


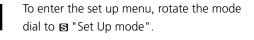
- Connect the A/V cable to the A/V connector of the camera.
- Note 1: When you connect your camera to a TV, the LCD monitor turns off automatically. Note 2: The audio terminal is red and the video terminal is yellow.

Chapter 6 Adjust the Camera Settings

Set up mode allows you to adjust the default settings of this camera.

<u>Using the Set Up Menu</u>







- Use ▲ ▼ on the four-way button to scroll through the menu.
- Press "OK" button to enter the submenu and finish the setting.

Note: Language and Date/Time settings, please see page 20, 21.

Format

This function allows you to delete all of the images, data, and information in your SD/MMC memory card.



In set up menu, select "Format".

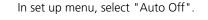
FORMAT CARD	
NO	
ن الله کې د کې د کې	
SELECT MENDBACK OK SET	

- If you want to format your SD/MMC card, select "Yes"; press "OK".
 - If not, select " NO", and then press "OK". Or you can press 🗉 to quit the setting.

Auto Off

To save the battery power, the camera turns off automatically when it is not in use for $1 \sim 10$ minutes.



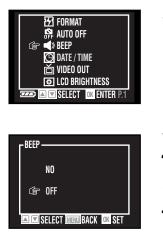


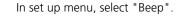
- AUTO OFF
僮 1 MIN.
3 MIN.
10 MIN.
OFF
SELECT MENU BACK K SET

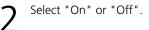
- Select "1 Min", "3 Min", "10 Min", or "Off".
 - Press "OK" button to finish the setting.

🛛 Веер

This function allows you to have sound effect when turning on/off as well as pressing the buttons.







Press "OK" to finish the setting.

Video Out

Both NTSC and PAL are TV's broadcast systems. The NTSC system is mainly used in U.S.A., Japan, Canada, Mexico, the Philippines, and Korea. The PAL system is used in the western Europe such as Germany, England, Switzerland, Holland, Italy (except for France) and Australia, Singapore, Thailand and China. As these systems have no compatibility, you cannot watch an NTSC system based TV in an area where a PAL system is used. This camera can switch the video output signal to both an NTSC system and a PAL system so you can watch the images on TV not only in your own country, but around the world.

중 FORMAT 윤 Auto off	
● BEEP C DATE / TIME	
企 首 VIDEO OUT 致 LCD BRIGHTNESS	
SELECT K ENTER P.1	

In set up menu, select "Video Out".





Press "OK" to finish the setting.

Note: Image will be black & white on the TV screen if you set the wrong TV system.

LCD Brightness

You can adjust the LCD brightness value here.



In set up menu, select " LCD Brightness".

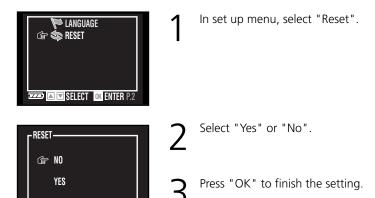


- Adjust the brightness value from $1 \sim 9$ with $\blacktriangle \lor$ on the four-way button.
 - Press "OK" to finish the setting.

Reset

A 🔽 SELECT MENU BACK 🛛 K SET

You can restore the settings to default by using "Reset" function.



Setting	Default
Flash Mode	Off
Macro	Off
Quality	Best
Exposure Compensation	0.0
Self-timer	Off
Burst	Off
Metering Mode	Full
ISO	Auto
Веер	Off
Digital Zoom	Off
DPOF-Index	No
Slide Show Interval	3 sec
Auto Off	3 min
Video Out	NTSC
Language	English

Trouble Shooting

Problem	Possible Cause	Solution
The camera does not	The power is off	Press the power button to
work		turn it on
	The batteries are insert-	Reload the batteries cor-
	ed incorrectly	rectly
	The batteries are low or	Replace batteries with new
	drained	ones
The camera does not	The camera is not in	Rotate the mode dial to
take a picture when I	shooting mode	shooting mode
press the shutter	You did not press the	Press the shutter release
release button	shutter release button	button all the way down
	hard enough	
	The memory card is full	Replace another memory
		card, upload the images to
		a computer or delete all
		images
	The camera is still saving	Wait until the camera fin-
	the last image you take	ishes storing the image
	The flash is still recharg-	Wait for a few seconds
	ing	until the recharging is com-
		pleted.
	The batteries are low	Replace batteries with new
		ones
	You did not insert the	Insert the memory card
	memory card	
The flash does not fire	The battery power is low	Replace batteries with new
		ones
	The flash is off	Switch to other flash modes

Problem	Possible Cause	Solution
The images are blurry	The camera moves	Hold the camera steady or
	when you press the	use a tripod when taking
	shutter release button.	pictures
	The focus brackets are	Position the focus brackets
	not positioned on the	on your subject
	subject	
	Use macro mode to	Set the camera to shoot in
	shoot subjects within	normal focus or macro
	normal focus, or vice	focus and then take the
	versa	picture again
	The light is low and the	Use a tripod, open up the
	flash is off	aperture, and turn on the
		flash
	The lens is dirty	Clean the lens
The images are too	The flash is on when the	Turn off the flash
bright	subject is bright enough	
	Too close to the subject	Move back from the sub-
	when taking pictures	ject and take the picture
	with the flash on	again
	Light sources other than	Avoid pointing the camera
	the flash provide too	to bright light sources and
	much light	use exposure compensa-
		tion
The images are too	The flash is off	Turn on the flash
dark	The subject is in dark	Turn on the flash

Specifications

Туре

• Digital camera 4.1z8

Effective Pixels

- [Total] 4.07M pix (2336 x 1744)
- [Image] 3.98M pix (2304 x 1728)

Image Capture Unit

• Sensor :	1/2.5 inch-type IT-CCD
• Image Size :	2304x1728 [Large]
	1600x1200 [Medium]
	640x480 [Small]
	320x240 [QVGA]

<u>Lens</u>

• Focal length :	f=6.0 - 48.0mm (35mm camera format
	equivalent : 36 – 288mm)
• f/-number :	Wide: f/3.2 – f/8.0
	Tele: f/3.4 – f/8.0
• Aperture priority (F3.2, F4.8 and F8)
• Distance :	60cm - infinity (wide)
	1m - infinity (tele)
• Macro :	10cm - 60cm (wide)

Digital Zoom

•2.0 x

Auto Focus (AF)

 Focusing type : 	TTL CCD AF
• AF area :	Spot metering/ Center average metering/
	Whole image with Center-weighted average metering.

Specifications

<u>Monitor</u>

- 1.6", 70000 pixels color D-TFD-LCD (with LED BL)
- Frame coverage : 95% or more

<u>Shutter</u>

- 2-1/1000 sec., electro-mechanical and charge-coupled shutter plus aperture control.
- Bulb shutter (1 sec, 2 sec, 4 sec, 8 sec)

Exposure

- Exposure mode Program mode
- Metering mode Spot metering/ Center average metering/ Whole image with Center-weighted average metering.
- Exposure Compensation +/- 2.0 Ev (1/3 Ev Step)

Sensitivity

• Auto, 100, or 200

Self timer

10 sec/ 3 sec duration

<u>Built-in Flash</u>

- Auto control built-in type
- Range Wide: 0.5m 2.8m
 - Tele: 0.5 m 2.5m

Scene Modes

• Normal, Sepia and Black & White

Storage

 Media SD/ MMC card Image file type JPEG, DCF v1.0, DPOF v1.0 Video Clip : AVI

I/O External

- DC input DC 6V adaptor (regular plug)
- Video output Mini-plug type. NTSC and PAL (selectable)
- PC connection USB

Power Sources

- Four AA batteries. (Alkaline, Ni-Cd, and Ni-MH are available.)
- AC adaptor (DC +6V 2A) ⊖ ④
- Rechargeable capacitor

Dimensions

- Size 122.8mm x 64.3mm x 46.5mm
- Weight 270g without batteries

System Requirements: Windows

- CPU Pentium II or more
- Memory At least 32MB
- OS Windows 98 / Windows 98 SE /
 - Windows 2000 / Windows ME /
 - Windows XP.
- Interface USB 1.1
- VGA color monitor
- CD-ROM

System Requirements: Macintosh

 Memory 	At least 32MB
• OS	Mac OS 9 / 9.0.2 / 9.0.4 / 9.1 / 10.0 /10.1
	/10.2
 Interface 	USB 1.1

• VGA color monitor

620-4100AE-00